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BEFORE THE POSTAL RATE COMMISSION WASHINGTON, D.C. 20268-0001

POSTAL RATE AND FEE CHANGES, 1997 Docket No. R97-1

FLORIDA GIFT FRUIT SHIPPERS ASSOCIATION INTERROGATORIES TO UNITED STATES POSTAL SERVICE WITNESS: MICHAEL D. BRADLEY

FGFSA/USPS-T-13-1-39

July 28, 1997

Florida Gift Fruit Shippers Association hereby submits the following interrogatories to USPS Witness Bradley.

Attorney

Florida Gift Fruit Shippers

Association

INTERROGATORIES TO WITNESS BRADLEY

FGFSA/USPS-T-13-1

Please refer to LR-H-82 and describe how the data contained in HCSS (discussed in your testimony at page 12) relate to the data in the file used to develop the sample frames for the four TRACS highway transportation accounts in TRACS.DESIGN(HWY1).

- a. Are the contracts in the HCSS and the routes served by those contracts (as indicated by HCRID) identical to the routes used to create the TRACS sample design in the program TRACS.DESIGN(HWY1)? If not, please give a full description of all differences and explain why they differ.
- b. Is the highway cost account for each contract in HCSS identical to the information which identifies routes in TRACS.DESIGN.(HWY1)? If not, please explain all differences and why they differ.

FGFSA/USPS-T-13-2

In your testimony, page 19, Table 3, it is noted that some contracts specify multiple vehicle capacities.

- a. Are different capacity vehicles used on the same route on different days? If so, does the difference in capacity relate to the volume of mail?
- b. Are vehicles of different capacities regularly used on different segments on the same route?

c. Tor those contract cost segments with multiple vehicle capacities (Table 3) does the ability to use different size vehicles increase the variability of purchased transportation costs?

FGFSA/USPS-T-13-3

Please confirm that, in HCSS, the data for route length is actual highway miles, rather than great circle distance miles, and that you use highway miles in your analysis.

FGFSA/USPS-T-13-4

At page 49 of your testimony you recommend that the commission use the variebilities calculated on the data set with the unusual observations removed.

- a. Are these variabilities shown in Table 15?
- b. If the Commission were to adopt your recommendation, would you also recommend that the TRACS system develop separate samples for Intra\SCF Vans and Trailers, and for Inter-SCF vans and Trailers, thereby reflecting the separate variabilities shown in your Table 15?

FGFSA/USPS-T-13-5

Please provide the total number of contracts in force which are included in your analysis, with a breakdown between Inter SCF,

Intra BMC and Inter Bmc. Confirm that these contract were in force in August, 1995, or, if you do not confirm, explain the period of time which the contracts were in force.

FGFSA/USPS-T-13-6

Provide a copy of the BASIS SURFACE TRANSPORTATION SERVICES CONTRACT GENERAL PROVISIONS in use during August, 1995. See the form provided in Docket No. R80-1, TR 17,870.

FGFSA/USPS-T-13-7

When each contract is being negotiated or renegotiated:

- (a) How is the capacity being purchased related to the needed capacity for each Contract Route?
- (b) What projections of volume is used to ascertain the capacity to be purchased?
- (c) Is there any analysis made of actual capacity utilized by the day and week?
- (d) Is the capacity purchased for each Contract Route based on estimates of average volumes to be carried each day of a normal week?
- (e) What period(s) are used for the preparation of estimates of average capacity utilization on each Contract Route?

FGFSA/USPS-T-13-8

Describe the investigation made to determine the capacity being purchased, as related to actual or anticipated volume of mail for the Contract Route over a period of time.

FGFSA/USPS-T-13-9

How does the capacity purchased for each Contract Route respond to changes in the volume of mail actually transported over the Contract Route?

FGFSA/USPS-T-13-10

How is the underutilization of purchased capacity taken into account at the time of negotiation for replacement contracts?

FGFSA/USPS-T-13-11

Provide the volume profile - pieces, weight and cubic feet - of each class and subclass of mail using the purchased capacity, by type of Contract Route for the fiscal year covered by your analysis.

FGFSA/USPS-T-13-12

In the contracting process, what volume projections are used to ascertain how much capacity should be purchased for each Contract Route?

FGFSA/USPS-T-13-13

Describe the investigation made to determine the behavior of capacity purchased as related to actual and projected volume of mail over a period of time.

FGFSA/USPS-T-13-14

What effect do changes in volume have on unused capacity of purchased transportation?

FGFSA/USPS-T-13-15

Describe how the capacity being purchased is a function of estimates of mail volumes.

FGFSA/USPS-T-13-16

Your testimony is that the "general nature of the highway transportation network is basicly the same as in 1986" (p.7,1.22) You also state that "approximately the same number of contracts is in force" and that operational changes "have not had a major impact on the purchased transportation network". Please describe the "changes in network capacity" as those words are used in your footnote 6 on page 8 of your testimony.

FGFSA/USPS-T-13-17

Quantify - pieces, weight and cube - added to the highway

transportation network as a result of the efforts of the Postal Service to divert First Class Mail, as well as other preferential mail. Quantify by type of surface transportation - Intra SCF, Inter SCF, Intra BMC and Inter BMC

FGFSA/USPS-T-13-18

Was your analysis designed "to measure the impact of volumes on cost"?

If so, (a) What mail volumes did you take into account?

(b) How are mail volumes taken into account in your analysis?

FGFSA/USPS-T-13-19

Do the cubic foot miles which you use in your analysis represent the calculated capacity of all purchased transportation contracts?

How are the cubic foot miles determined by you related to mail actually transported under the contracts?

FGFSA/USPS-T-13-20

Provide the actual mail volumes transported in each of the 5 contract types listed in your Table 3 in 1990 and 1996.

FGFSA/USPS-T-13-21

On page 21 of your testimony you state that the HCSS data are

suitable "for estimating the variability of purchased transportation costs". Please explain to what the "variability" relates. If "variability" relates to mail volume, provide the mail volumes which you took into account.

FGFSA/USPS-T-13-22

Explain "exceptional" and "emergency" contracts and the differences between these terms.

FGFSA/USPS-T-13-23

Explain why the variability of the cost of exceptional contracts is "assumed to be one hundred percent". (p.22, fn.12) When these contracts replace a break down of equipment or driver illness, is the cost of the basic contract reduced? Is the cost of exceptional contracts "attributable"? If so, to what mail is the cost attributed?

FGFSA/USPS-T-13-24

In your Table 2 (page 17), 13.67% of Inter SCF observations were for emergency, 3.7% of Intra BMC observations were for emergency and 7.6% of Inter BMC observations were for emergency. Explain the reason for this wide difference in the emergency contracts.

FGFSA/USPS-T13-25.

Where there is an imbalance between the out-bound mail volume and the in-bound mail volume, a portion of the capacity on the in-bound, or backhaul, movement will be empty. Do you believe that an empty backhaul is merely a part of the cost of the out-bound haul?

(a) Do you believe that, if the out-bound haul varies with volume, that the backhaul similarly varies with volume and is attributable to the same volume changes that caused the changes in the costs of the out-bound haul? Please explain your answer.

(b) Has there been a change in the volume of mail for the in-bound haul (that is, for Intra BMC transportation, the haul to the BMC) due to the changes in the pattern of mail entry points to take advantage of destination entry discounts? If so, quantify the change.

FGFSA/USPS-T13-26.

Do you agree that over time the Postal Service can change the size (capacity) of trucks to accord with the underlying secular changes in the volume of mail on particular routes?

FGFSA/USPS-T13-27.

As a hypothetical, assume that on a particular Intra-BMC route the volume of mail outbound from the BMC greatly exceeds the volume inbound to the BMC on a regular basis, including peak days.

- a. Do you agree that the volume of outbound mail determines the appropriate size (capacity) of the truck for that route? Explain fully any disagreement.
- b. If the volume of outbound mail exhibits secular growth, do you concur that the size of the truck could be expanded, up to the maximum size van, to accommodate that growth in volume. Explain fully any disagreement.
- c. Assume than on a particular Intra-BMC route the Postal Service has in fact increased the capacity of the truck to accommodate an expanded volume of mail outbound from the BMC. Do you agree that the Postal Service can not dispatch a large truck to carry the outbound volume, but have a much smaller vehicle return to the BMC with the much smaller volume of inbound mail? Explain fully any disagreement.
- d. In your opinion, is the substantial excess capacity on the inbound trip to the BMC caused more by the small volume on the inbound trip, or is the excess capacity more causally related to the large outbound volume? Please explain fully.

FGFSA/USPS-T13-28.

Do you agree that at any particular point in time, the amount of capacity in a particular route is fixed? If so, please explain.

FGFSA/USPS-T13-29.

In Docket No. R80-1, the Postal Service stated that the amount of capacity purchased for a given route is matched to the expected average weekly peak-day volume on that route.

- a. Is it your understanding that capacity purchased on a highway route is still matched to the expected average weekly peak-day volume? Explain fully any negative answer.
- b. Consider an Intra-BMC roue that consists of a round-trip, the first portion being outbound from the BMC and the return portion being inbound to the BMC. For purposes of purchasing capacity, would the peak-day volume consist of (i) the heaviest daily volume in both directions combined, or (ii) the heaviest daily volume in one direction only? Please explain your answer.

FGFSA/USPS-T13-30.

In Docket No. R80-1, the Postal Service said that excess capacity

is caused by a complex set of factors, including irregularity of demand, inflexibilities in the supply of transportation and intermediate stops on routes. (USPS-T-6, pp. 17-18, cited at \P 0408 in the Op. & RD.)

- a. To your knowledge, does the Postal Service continue to have unused capacity on its highway trucks much of the time?

 Please explain any negative answer.
- b. Suppose that on an Intra-BMC route the Postal Service needs to send a large capacity truck outbound from the BMC because of the outbound volume. That same truck must travel back to the BMC, even if the inbound volume is very light, and the truck has much unused capacity. Would the need to have the same truck return to the BMC be an example of an inflexibility in the supply of transportation? In the event your answer is negative, please supply an example of an "inflexibility in the supply of transportation."
- c. Please articulate and explain all economic principles of which you are aware that causally relate the volume of mail actually found on a largely empty return trip (or back haul) to the empty capacity on the truck, and the cost of returning that empty capacity to the BMC.

FGFSA/USPS-T13-31.

Please refer to equation (1) at p. 6 of your testimony, and your statement that "[t]he value of the β_1 coefficient is the variability."

- a. Would it be more correct to say that (i) the value of the coefficient estimates the variability of cost with respect to changes in cubic foot miles (CFM) of capacity, than (ii) the coefficient estimates the variability of cost with respect to changes in the volume of mail? Please explain your answer.
- b. Are you interpreting the coefficient β_1 as a proxy for estimating the variability of cost with respect to changes in the volume of mail? Please explain your view of the linkage between variability of highway transportation costs with respect to changes in the volume of mail and the variability of transportation costs with respect to changes in cubic foot miles of capacity.
- c. For intra-BMC highway transportation, do the data which you use for cubic foot miles (CFM) in your equation (1) reflect (i) the round-trip mileage on an Intra-BMC route, or (ii) the

one-way mileage, either inbound or outbound?

FGFSA/USPS-T13-32.

- a. As a hypothetical, assume that (i) on the outbound leg of a particular Intra-BMC route the load factor outbound from the BMC averages X thousand cubic feet, (ii) the average load factor on the return or inbound leg is 0.8X thousand cubic feet, (iii) over both directions the volume averages 1.8X thousand cubic feet, and (iv) the load factor fluctuates by as much as ±40 percent of the average on both the outbound and inbound legs. In your opinion, would the capacity of the truck required for this route be determined chiefly by the volume of mail on the outbound leg, the inbound leg, or the volume moving in both directions? Please explain the reasoning that underlies your answer.
- b. For the hypothetical route described in preceding part a, assume further that, as the result of various changes, such as a secular growth in the volume of mail plus a significant increase in the volume of mail drop shipped to the BMC (e.g., in response to the introduction of dropship discounts), the average volume of mail on the outbound leg from the BMC increases to 1.3X thousand cubic feet, while the volume in the

inbound direction diminishes to 0.5% thousand cubic feet (over both directions, the total volume still averages 1.8% thousand cubic feet). Daily fluctuations in volume still range up to ±40 percent of the average daily volume. In your opinion, what is the likelihood that the Postal Service would need to increase the capacity of the truck to accommodate the additional volume of mail on the outbound leg?

- c. Further assume that a shift such as that described in preceding part b were to occur systemwide. (i) Isn't it likely that the data in your equation (1) would show a change in capacity, as well as a corresponding change in cost, even though there was no change in the total cubic foot miles of mail actually transported? (ii) Would you describe such a systemwide shift as a change in operating structure? If not, how would you describe it?
- d. Following a systemwide shift such as that described in preceding part c, in your opinion, is the mail that happens to travel on the inbound leg to the BMC causally responsible for the empty capacity usually found on the inbound leg? If affirmative, please provide a full explanation.

FGFSA/USPS-T13-33.

- (a) Please describe fully your familiarity with the TRACS programs described in LR-H-82 and LR-H-84 which are used to develop the distribution keys for attributable highway costs. In your answer, please state explicitly whether you are knowledgeable about the methodology, procedures and formulas used by TRACS (i) to expand sampled mail volume up to the container level, (ii) to expand sampled mail volume from the container level up to the whole truck or van, and (iii) to compute cubic foot miles of transportation service for each class and subclass of mail.
- (b) Are you familiar with and knowledgeable about the way the TRACS sample is selected? For Intra-BMC routes, would you know how many TRACS samples are taken of trucks outbound from the BMC, and how many samples are taken of trucks inbound to the BMC (including samples taken at the BMC itself)?
- (c) Have you ever used any of the data contained in the CDs in LR-H-82 or LR-H-84 for any kind of analysis, or any other purpose? If so, please describe the nature of such analysis.

FGFSA-USPS-T-13-34

Please provide a list of all your publications that deal with the subject of transportation and transportation economics, including all expert witness testimony.

FGFSA/USPS-T-13-35

Please list all courses in transportation and/or transportation economics that you have taught.

FGFSA/USPS-T-13-36

For each Intra-BMC and Inter-BMC highway transportation routes, please provide the interior vehicle dimensions and cubic foot capacity for the 3 most commonly used vehicles.

- a. For each of the 3 vehicles, indicate the approximate proportion of total cubic foot capacity which those vehicles represent.
- b. For each of the 3 vehicles, please indicate the maximum weight capacity of the lading in the vehicle. If the maximum weight varies from state to state, indicate the lowest maximum weight capacity and identify the state with such limitation

FGFSA/USPS-T-13-37

If a trailer used in Inter-BMC transportation is fully bed-

loaded with Bulk Rate Regular Standard B mail, will the over-theroad weight limit of the loaded vehiclerestrict or limit the cubic
feet of the mail that can be loaded on the trailer? In your
response, please provide the cubic foot capacity of the trailer
(give the height, width and length measurements) and the weight
limit of the lading in the trailer which you take into account.

FGFSA/USPS-T-13-38

Confirm that the maximum allowable density of a trailer used in postal highway transportation can be properly calculated by dividing the cubic feet capacity of the trailer by the over-the-road weight limit of the lading of the trailer. If you do not confirm, please fully explain.

FGFSA/USPS-T-13-39

If the density of a sub-class of mail transported in highway transportation exceeds the maximum allowable density of the vehicle transporting the mail:

- a. Do you agree that the excess density of this sub-class of mail could limit or restrict the quantity of other mail that might be loaded in the trailer? Fully explain your response.
- b. Do you agree that it would be reasonable and appropriate to reflect the excess density of this sub-class of mail, along with

actual cubic feet, in determining the allocation of the costs of the highway transportation? Fully explain your response.

CERTIFICATE OF SERVICE

I hereby certify that the foregoing document has this date been served on all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.

Dated this 28th day of July, 1997.

M. W. Wells, Jr.

Attorney